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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/967,232	09/28/2001	William J. Jones	247171-000305USP1	1787
41230 7590 12/18/2008 CUMMINS-ALLISON CORP. C/O NIXON PEABODY LLP 161 N. CLARK ST., 48TH FLOOR CHICAGO, IL 60601				
EXAMINER SHAPIRO, JEFFERY A				
ART UNIT 3653		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/967,232

Applicant(s)

JONES ET AL.

Examiner

JEFFREY A. SHAPIRO

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 11-89 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11, 12, 15, 17-20, 22-29, 33, 35, 36, 38-40, 49-56, 59, 65, 68-70, 79, 80, 87 and 89 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Continuation of Disposition of Claims: Claims withdrawn from consideration are 13,14,16,21,30-32,34,37,41-48,57,58,60-64,66,67,71-78,81-86 and 88.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. It is not clear whether the return receptacle is "configured" to return substitute funds. The return receptacle does not effect "returning" substitute funds, but instead only recites a receptacle that holds a stack of mixed currency and currency substitutes.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 5, 6, 11, 15, 17-20, 22-24, 33-36, 38-40, 49, 56, 59, 65, 68-70, 79, 80, 87 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Munro et al (US 5,790,697) in view of Izawa et al (US 5,420,406).

Regarding Claims 1, 11, 38-40, 56, 79, 87 and 89, Munro discloses a document processing apparatus (10) that processes stacks of currency placed in an input receptacle (12) in mixed denominations through a transportation mechanism (16) past a discriminating/evaluating unit (18a, b) to one or more output receptacles (20). See Abstract and figure 2a of Munro. Munro also discloses a controller (30) with a memory (34). Munro also discloses sending flagged unacceptable bills to a particular output receptacle while also sending acceptable bills to another output receptacle. See col. 93, line 10-col. 94, line 24.

Regarding Claim 80, Munro discloses stranger bills, no call bills, suspect bills, flagged bills and authentic bills.

Regarding Claims 5, 6, 23 and 24, Munro discloses operating said apparatus at a range of speeds at col. 43, lines 10-15 and 62-67.

Regarding Claims 15, 17-20, 22, 65, 68-70, note that Munro illustrates a display/interface in which a user can program the apparatus. See Munro, figures 62-64.

Regarding Claims 1, 11, 33-36, 49, 56, 59, 79, 87 and 89, Munro does not expressly disclose, but Izawa discloses an evaluation unit having both a validator/discriminator (10) and a barcode reader (24, 25), in which the controller converts a signal generated by the barcode reader into a set of characters, for the purpose of processing both barcoded documents as well as paper currency. See abstract, col. 2, line 47-col. 3, line 36 and col. 5, lines 21-44.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have incorporated a barcode reader in Munro's evaluation device, as taught by Izawa, for the purpose of handling barcoded documents placed in the same stack of documents as paper currency.

Regarding Claim 35, official notice is taken that it is obvious to use a mirror to direct light beam to therefore direct them toward a detector/reader. Applicant's specification admits at p. 10, line 18-p 12, line 6 that barcode readers are well-known in the art and are well-known to include mirrors for deflecting light as required by the situation, i.e., depending upon how close the reader is placed to the scanned document.

8. Claims 2-4 and 51-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Munro et al (US 5,790,697) in view of Izawa et al (US 5,420,406) and further in view of Izawa et al (US 6,264,556 B1).

Regarding Claims 2-4 and 51-54, Munro discloses the document processing apparatus (10) as described above.

Munro does not expressly disclose, but Izawa discloses use of coded coupons, scrip or secured paper, which is considered to be paper tokens and substitute funds at abstract and col. 3, line 53-col. 4, line 7.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have processed various types of substitute funds such as casino scrip, coupons, gift certificates, and paper tokens or any other type of secure document typically used in commerce in Munro's apparatus, as taught and suggested by Izawa since Munro's device is intended to process secure documents typically used in commerce and one ordinarily skilled would have found it logical to configure the validator to accept as many formats of cash available that customers use in commerce for the purpose of promoting increased use of the machine.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Munro et al (US 5,790,697) in view of Izawa et al (US 5,420,406) and further in view of Molbak (US 5,620,079).

Regarding Claim 12, Munro discloses the document processing apparatus (10) as described above.

Munro does not expressly disclose, but Molbak discloses incorporation of a communication port (1826, 1828), as illustrated in figures 18a and b.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have incorporated a communication port in the form of a modem, as taught

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by Molbak, in Munro's apparatus, for the purpose of transferring data. See Molbak at col. 11, line 62-col. 12, line 29.

10. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Munro et al (US 5,790,697) in view of Izawa et al (US 5,420,406) and further in view of Ueshin (US 4,690,268).

Regarding Claim 25, Munro discloses the document processing apparatus (10) as described above.

Munro does not expressly disclose, but Ueshin discloses incorporation of a facing mechanism (20), as illustrated in figures 2-7.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have incorporated a facing unit, as taught by Ueshin, in Munro's apparatus, for the purpose of reversing a banknote.

11. Claims 26-29, 50, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Munro et al (US 5,790,697) in view of Izawa et al (US 5,420,406), further in view of Ahlquist et al (US 6,112,982), further in view of Yamashita (US 5,293,033), further in view of Storch (), further in view of Roustaei (5,777,314) and still further in view of Walker et al (US 6,754,636).

Regarding Claims 26-29, 50 and 55, Munro discloses the document processing apparatus (10) as described above. Note that Munro discloses various sensors such as magnetic sensors as well as optical sensors, each of which can be used to identify different substitute media having features detected by said sensors.

Note also that Izawa '406 discloses two barcode sensors (24 and 25) as well as magnetic sensors (20), infrared sensor (26), each of which can be used to identify different substitute media having features detected by said sensors.

Munro does not expressly disclose, but Ahlquist discloses incorporation of multiple barcode readers (80, 82 and 84), as illustrated in figure 3 and discussed at col. 3, lines 20-30, for the purpose of creating redundancy so as to ensure that barcodes transported along a transport mechanism are read.

Munro does not expressly disclose, but Yamashita discloses using multiple barcode readers, as illustrated in figures 1 and 2 for the purpose of ensuring the reading of barcodes located on various sides of a transport path through which the barcodes are transported. See Yamashita, abstract.

Munro does not expressly disclose, but Walker discloses at col. 36, lines 45-57, that vouchers may exhibit several barcodes on them.

Munro does not expressly disclose, but Storch discloses use of barcodes on currency. See figure 28 of Storch, which illustrates an upper and lower barcode with a reader placed to read the upper barcode.

Munro does not expressly disclose, but Roustaei discloses use of different types of barcodes, such as one, two and three-dimensional barcodes and using various readers for reading such barcodes. See abstract and col. 10, lines 7-42 of Roustaei.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have incorporated more than one barcode of various types for the purpose of

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imparting various information in a secure fashion on a secure document. See again Walker and Storch.

Additionally, it would have been obvious to one of ordinary skill in the art to have placed more than one barcode reader at any orientation necessary along the transport path of bills since one ordinarily skilled would have found it logical to do so for the purpose of redundancy as well as to obtain various barcodes located in different areas of a voucher or a currency bill. See again, Yamashita and Ahlmquist.

Further, it would also have been obvious to use various types of barcodes, i.e., symbology, such as one or two dimensional barcodes, which are read by different readers, for the purpose of imparting different information. See again, Roustaei.

Further regarding Claim 55, note that it would have been obvious as a matter of design choice to have made the barcoded media the same size as US currency bills, for the purpose of ensuring that the document processor can handle both bills and the media through the same transport mechanism as well as the fact that substitute media of same size as traditional currency can be easily stored in a customer's wallet or purse, i.e., anywhere other traditional paper currency is stored.

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 1-6, 11, 12, 15, 17-20, 22-29, 33, 35, 36, 38-40, 49-56, 59, 65, 68-70, 79, 80, 87 and 89 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-73 of U.S. Patent No. 6,880,692; Claims 1-78 of U.S. Patent No. 6,913,130; Claims 1-91 of U.S. Patent No. 6,959,800; Claims 1-31 of U.S. Patent No. 6,955,253 or Claims 1-26 of U.S. Patent No. 6,868,954 in view of Izawa et al (US 5,420,406). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are directed to the following.

A system and apparatus for discriminating and counting currency bills including receiving a stack of bills, transporting the bills, counting and determining the denominations of the bills utilizing a detector, determining whether the bills fail or meet certain criteria, halting the transporting when a failing bill is identified, and placing the failed bill as the last bill in one of the output receptacles.

Although not all of the claims may have recited a "barcode reader" that reads substitute currency, it is considered to be obvious to have included such a device in light of the teaching of Izawa. As described above, Izawa discloses an evaluation unit having both a validator/discriminator and a barcode reader, for the purpose of processing both barcoded documents as well as paper currency.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have incorporated a barcode reader in the currency processing devices of the '692, '130, '800, '253 and '954 patents for the purpose of handling barcoded documents placed in the same stack of documents as paper currency.

14. Claims 1-6, 11, 12, 15, 17-20, 22-29, 33, 35, 36, 38-40, 49-56, 59, 65, 68-70, 79, 80, 87 and 89 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1, 5, 13, 25, 26, 37 and 49 of U.S. Patent No. 7,103,438; Claims 1 and 6 of U.S. Patent No. 7,201,320; Claims 1-69 of U.S. Patent No. 6,843,418; Claims 1-24 of U.S. Patent No. 7,146,245 or Claims 14, 19, 20, 31 and 41-47 of U.S. Patent No. 7,016,767. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are directed to the following.

A system and apparatus for discriminating and counting currency bills including receiving a stack of bills, transporting the bills, counting and determining the denominations of the bills utilizing a detector, determining whether the bills fail or meet certain criteria, halting the transporting when a failing bill is identified, and placing the failed bill as the last bill in one of the output receptacles, and a "barcode reader" that reads substitute currency.

15. Claims 1-6, 11, 12, 15, 17-20, 22-29, 33, 35, 36, 38-40, 49-56, 59, 65, 68-70, 79, 80, 87 and 89 are provisionally rejected under the judicially created doctrine of

obviousness-type double patenting as being unpatentable over Claims 7-29, 78-89 and 146-149 of copending Application No. 09/684,103 view of in view of Izawa et al (US 5,420,406). Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed toward the following.

a method and apparatus for discriminating and counting currency bills including receiving a stack of bills, transporting the bills, counting and determining the denominations of the bills utilizing a detector, determining whether the bills fail or meet certain criteria, halting the transporting when a failing bill is identified, and placing the failed bill as the last bill in one of the output receptacles.

Although not all of the claims may have recited a "barcode reader" that reads substitute currency, it is considered to be obvious to have included such a device in light of the teaching of Izawa. As described above, Izawa discloses an evaluation unit having both a validator/discriminator and a barcode reader, for the purpose of processing both barcoded documents as well as paper currency.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have incorporated a barcode reader in the currency processing device of the '103 application for the purpose of handling barcoded documents placed in the same stack of documents as paper currency.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

16. Applicant's arguments with respect to Claims 1-6, 11, 12, 15, 17-20, 22-29, 33, 35, 36, 38-40, 49-56, 59, 65, 68-70, 79, 80, 87 and 89 have been considered but are moot in view of the new ground(s) of rejection.

Regarding submission of any future terminal disclaimers in this case, it is suggested that Applicants' representative ensures that the record properly reflects authorization to sign for said applicants in order to avoid refusal of entry of an otherwise perfectly acceptable terminal disclaimer, as had been the case in the prior submission.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY A. SHAPIRO whose telephone number is

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(571)272-6943. The examiner can normally be reached on Monday-Friday, 9:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571)272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey A. Shapiro/
Examiner, Art Unit 3653

December 16, 2008